Reviewer's report

Title: Hypertension in the Parsi community of Bombay: A study on prevalence, awareness and compliance to treatment

Authors:

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Reviewer: Dr Rajeev Gupta

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Unable to decide on acceptance or rejection until the authors have responded to the compulsory revisions

Re: HYPERTENSION IN THE PARSI COMMUNITY OF BOMBAY: A STUDY ON PREVALENCE, AWARENESS AND COMPLIANCE TO TREATMENT

General comments:
1. The article contains very useful information of prevalence and control status in an upper middle class Indian population.
2. The article and the tables need to be rewritten in the present context using descriptive epidemiology techniques. Major revision is needed.
3. The age-specific differences in blood pressure levels and hypertension prevalence should be highlighted. All the prevalence rates should be age-adjusted.

Specific comments:

Introduction:
4. Age-specific characteristics of the Parsi population should be mentioned.
5. It seems that author imply that age-distribution pyramid of Parsis is different that the general Indian population. This fact should be corroborated by a table or a population distribution pyramid in the introduction section.
6. In the introduction the authors should describe a brief introduction of the problem of hypertension in India using previous Indian studies.
7. Previous Indian studies of treatment status of individuals should be quoted. There are many studies. All the studies report poor compliance and control.

Methods:
8. I am sure that data regarding other hypertension risk factors such as smoking, weight, height, body-mass index, etc have been collected in a study of such magnitude. These should also be reported in the article.
9. Statistical analysis methods need to be reported completely.
10. The age-specific rates in groups 65 are insufficient to derive age-related changes in hypertension. In view of a large sample size it would be useful if authors could report results of age groups 20-29, 30-39, 40-49, 50-59, 60-69, 70-79 and 80+.
11. I would suggest that all the data are age-standardised to either Bombay urban population or Indian urban population. Results of men and women should be reported separately at all levels.

Results
12. Age-adjusted prevalence rates should be given. Help of an expert statistician would be required.
13. The subheadings are unnecessary and should be deleted.
14. The tables also need to be redesigned and reformatted with the newer age-specific data and age-adjusted results.
15. How was control of BP defined?
Discussion:
16. Subheadings are unnecessary.
17. Para 2. Prevalence of hypertension is about 3-4% in rural India. This statement is factually incorrect and is based on the older definition of hypertension (>160/>95) and not the newer one (>140/>90). Please recheck.
18. We cannot compare prevalence rates in Indian populations with Parsis unless age-adjusted rates are given.
19. Prevalence of isolated systolic hypertension of 17% in rural India and 20% in urban populations. Is factually incorrect and this should be checked from the references.
20. Study limitations include study of a single community, lack of data regarding hypertension risk factors, BP measurement on a single day, and white-coat effect.
21. Major revisions are required in the paper before it is accepted for publication.

Competing interests:

None declared.